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ABSTRACT

Guidelines for organizing parents, school staff, and community members for the purpose of building or redesigning a playground are provided in this document. After brief discussions of needs assessment and what to do in the first planning meeting, the paper focuses on the responsibilities and activities associated with three committees: planning, materials and sites, and "workday." The responsibility for designing the playground is assigned to the planning committee. It is recommended that the planning committee construct a three-dimensional model of the playground. The materials and site committee is given responsibility for obtaining needed materials, getting materials to the site, and preparing the site for the workday committee. Finally, the workday committee is assigned responsibility for scheduling work, organizing volunteers, and determining workday responsibilities. A sample playground project timeline is appended. (RH)

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BUILDING A CREATIVE PLAY STRUCTURE

DEVELOPING A PLAN AND PREPARING FOR WORKDAYS

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Assessing Needs

If you want to build a playground, you have to have a plan. Because no two locations will be the same, your playground should be designed to be the best possible for your children. As you think about your goals for a playground you will want to consider the needs of your children. What playground components do you have? What do you want to change or add? What do you want to keep? Does your present playground have space for games with rules, but very little provision for dramatic play? Are there some forms of play you need to enhance for your children?

As you consider how to develop your playgound, you will want to review the areas or zones your playground will include. How will you accomodate all kinds of play including physical exercise, dramatic play, creative play, construction play and organized play? Will the playground provide for levels of play from solitary play to cooperative play? To remind yourself of all the positive characteristics of a creative playground, you can use a checklist developed by Joe Frost (see Appendix A). The checklist will help you check out how all the desirable areas of a creative playground facilitate creative play in children.

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Getting Underway

The First Planning Meeting

Interest Building

Once you are convinced that a playground should be built, you will also need to sell others and develop enthusiasm for the project. There

are several ways to build interest. Of course your own enthusiasm in conversations with others will be a most effective strategy; however, there are other steps you can take to get enough people actively involved to have a successful outcome to your goals.

If you are building a church, school, or day care playground, you will want to include parents, congregation members, staff, and other community members in development and implementation of the project. The most obvious way to communicate your ideas is through a meeting. PTA meetings, christian education meetings, staff meetings, and administrative meetings are all opportunities to build interest in constructing a playground. At the initial meeting you will want to orient the audience to the need for a new or redesigned playground, develop strategies for acquiring resources, and delegate responsibilities through committee assignments.

We have found that the quickest and most successful way to inform people about dangerous or sterile playgrounds and the contrast provided in a creative playground is to prepare a slide presentation. Slides should be taken of examples of traditional playground with protruding concrete footings, equipment in disrepair, unsuitable ground covers, etc. Your object is to make your case as to why a new playground is needed. If your present playgound has dangerous or inappropriate elements, they can be included in the slide presentation.

After negative playground characteristics have been reviewed, you will want to show examples of creative playgrounds. Slides of good examples of playgrounds should include multipurpose climbing structures, tire swings, equipment for dramatic play, vehicle paths, storage facili-

ties, and all other areas which are present in the creative play environment. As the presentation is made, the desired characteristics and rationale for developing the playground should be noted and discussed.

Brainstorming Resources

Following the orientation to the need for the playground project, actual planning can begin. At this point a brainstorming session might be a way of getting ideas generated about playground design and ways of obtaining the materials needed to complete the playground. At the initial stage discussions will be general because the playground design has not been initiated and specific requirements for items such as lumber, hardware and utility poles, are not known. It is still important to conduct the idea session to get a feeling for the resources which may be developed through meeting participants. If finances are a problem, it will be crucial to begin developing leads for getting building materials at minimal cost early in the game.

Assigning Committees

Before the meeting is concluded, committees should be formed to conduct the necessary tasks in the planning and coordination needed to prepare for actual construction. Although there are various ways to organize, one possibility is to have a planning committee, a materials and site committe, and a workday committee. Each of these committees will work separately, but also meet together regularly to support each other and coordinate their efforts in mutual planning and preparation.

The planning committee is responsible for the overall design planning of the playground. The materials and site committee locates needed construction materials through donation and/or purchase and makes sure

that the materials are delivered to the site and sorted prior to the workday. The workday committee makes all of the arrangements necessary for conducting the workday, including the enlisting of enough volunteers to accomplish workday activities. When each committee has completed their separate initial tasks, a second organizational meeting can be called for the total group to review committee work and plan for the construction stage of the project.

The Planning Committee

Gathering Ideas

The planning committee has the responsibility for designing the playground. If done comprehensively, the design will include drawing a plan, as well as constructing a model. Although the extent of planning is time consuming, the advantages will become obvious when construction commences smoothly on the work days.

The planning committee will want to spend some time continuing the exploration of ideas for the playground begun at the initial meeting. Members of the committee may want to visit some creative playgrounds if they are available within driving distance. Next, a study of the site should be made to become familiar with physical characteristics. Finally, the committee can determine how their ideas can be utilized as they begin to design the playground on a site plan.

Site Study

While at the site, the committee will accomplish several tasks which will help them understand the possibilities unique to the site. Each of the following activities contributes to preparation for actual playground design.

1. Accurately measure the property. If an architectural site plan is available, measurements can be taken from it. Otherwise, the property will need to be measured.

2. Locate trees and any other permanant structures. These measurements are taken by measuring from property lines.

3. Locate underground or overhead utility lines, pipes and conduits.

4. Determine sun direction or angles during play periods. In warm climates this can be very important to avoid placing equipment in direct sun during hot weather.

5. Determine direction of prevailing winds. Are children protected from north winds in the winter?

6. Describe terrain if it is not flat. The profile of the property will have implications for location of elements of the playground.

7. Indicate the make-up of the soil and ground cover. Is grass present or is the soil rocky? sandy? hard packed? Will the playground become muddy easily?

8. Locate where trucks involved in work or delivery of material will have access to the property.

9. Locate the play area as it is related to other areas which might be disturbed by noise levels. Are there classrooms, private residences or sleeping areas at a day care setting which need to be considered in the design process?

10. Locate existing fence or where fences will need to be constructed for the safety of the children.

Developing the Plan

As the planning committee begins to consider how the playground design will begin to take shape, they will want to keep in mind the principles of playground development which impact upon playground arrangement.

The first step in developing a sketch on paper is to draw the site to scale on a large piece of paper. To accomplish this the site is

measured and drawn using 1/4" per foot. Next, existing trees, shrubs and other permanent features which will remain should be noted.

The committee will then review the types of play which will take place. As the plan develops, planners will want to keep in mind where opportunities will occur for solitary, parallel, associative and cooperative play. Will the site plan include spaces where children can be alone, as well as play in small and large groups? Other kinds of play to be considered are exercise play, dramatic play, creative play, and organized play. The site is studied to determine where the best zones or areas can be developed to include climbing structures and swings for physical exercise, where sand and water play and art and woodworking activities can be located for creative expression, and where sufficient space can be arranged for organized games. On the overall plan, do playground features include vehicles, housekeeping centers and other areas which will facilitate dramatic play? On what portion of the site will loose parts construction be located? Where will storage be located? Has a tricycle path been included which will not interfere with or be located too close to other types of play?

As areas of zones are located and refined, traffic flow and transitions are accounted for between one area and another. The plan should provide for natural movement from one zone to another. Adequate space should be provided for the desired equipment.

The drawing of the plan can now be developed until completed. Each piece of equipment and area is drawn to scale on the plan. Inevitably, changes will be made as planners become aware of an additional idea which might be included, or a different arrangement which will be more

attractive or appropriate. Often, as the plan is developed on paper, the committee becomes aware that the site will not accommodate all of the items as originally proposed. If this occurs, the committee will need to reassess their own goals and make the difficult decisions about deleting or changing some components of the design.

If it is feasible financially, an architect should be retained to draw the final site plan. Not only will the architect be able to provide a professional drawing, but will often have helpful ideas for the design. Frequently, the planning committee can recruit an architect who has children attending the school or center where the playground will be located and is interested in helping with the playground. If an architect is a part of the planning committee, he/she can provide leadership in planning from inception to the final drawing.

Model Construction

If at all possible the committee should also plan to construct a three-dimensional model of the playground plan. The obvious reason for this step is that it will be easier to understand how the real playground will look. Also, when arranging and building the model, elements of arrangement will appear differently than they did on the drawing.

With a little imagination materials for the model are easy to find. Dowels, balsa wood, and mat board can be used to represent lumber, utility poles, fencing materials and railroad ties. Faucet washers, tires from model kits or sections of small hoses are used for tires. Nylon netting, plastic window screen and popsicle sticks can be fashioned into a chain-link fence or a vertical wooden fence. Green felt, an old towel, burlap, easter basket grass, green paper or ink blotter or pieces of imitation turf have all been used to represent grass. The bike path can

be made from black electrician's tape, while gravel and sand can be represented by cat litter, sandpaper, or real sand. Usually sandpaper is the best to use because it will not spill if the model is moved frequently. A trip to a hobby shop, toy store or rummaging through the family toy box will yield the other items such as vehicles, small dolls or miniature trees needed to complete the model.

Construction of the model begins with a cardboard or plywood base. If balsa wood, sandpaper, and other model components which are very light in weight are used, a piece of cardboard can be used as the base. Otherwise a wooden base is best. The base is measured to scale and cut. Next, the ground covers are attached. Finally pieces of climbing equipment, vehicles and other constructed representations are put in place. Model builders have found that new varieties of a "super" glue will hold a model climbing structure to the board, even it it is tipped sideways. Small nails or tacks can also be used to attach structures firmly to the base. As in construction of the drawing, all components of the model should be made as much to scale as is possible. This is difficult to achieve when using found materials, but, it will be more attractive and realistic if sizes are in similar proportions to the actual sizes of the real items.

The Materials and Site Committee

Procuring the Materials

The major responsibilities of the materials and site committee are to obtain the materials needed for building the playground, getting the materials to the site and preparing the site for workdays. To accomplish all of these tasks, the materials and site committee and workdays committee

will interface planning as they progress in their respective responsibilities for the playground.

Although the materials and site committee can begin immediately to locate sources for lumber, railroad ties and other building materials, specific amounts cannot be determined until the planning committee has pretty well determined the playground design. When this stage has been accomplished, the two committees will meet together to determine what materials will be needed. The group will proceed to consider each climbing structure, area or zone separately and determine the materials and hardware needed for each area.

After all lists have been completed separately, a master list is compiled of each kind of item, lumber, hardware, sand and gravel, sheet metal and paint until all needed items have been transferred to a single list. Once the committee has a complete, specific accounting of the materials which will be needed, it is ready to follow-up on sources for materials and begin contacting them for supplies.

Whether building materials are being purchased, donated or a combination of both, the committee will want to compile complete information for each resource. In addition to the name of the business, location and phone number, committee members will want to record the contact person who will be familiar with the project. As each business is contacted and the purchase or donation is arranged, the additional information as to materials, amount, and spcefications is noted under that source. Information on whether the items will be delivered or will be picked up by a committee member should also be noted. Dates and times for further contacts prior to the workday can also be included in the pertinent information for each source of materials.

In the process of procuring materials, the materials and site committee will be contacting other participants in the playground project who might have information on where the best sources are for materials. Often businesses such as lumber yards, hardware stores and paint stores will sell the materials at a reduced price if the organization building the playground is a nonprofit institution. Frequently the businesses will donate the items if they have a letter from the organization which they can use as documentation for a tax write-off.

Getting Materials to the Site

Well ahead of the first workday, the committee will review the arrangements made for materials. Sources for materials which will be delivered will be contacted to verify when the materials will be delivered. Some members of the committee will be delegated to make final telephone or personal arrangements for deliveries.

Other members of the committee will schedule items which must be purchased or picked up. To simplify later payment of bills, as few locations as possible should be used for buying hardware, paint, etc. Before purchases are made the person responsible will need to know what arrangements have been made for payment and billing information that is to be provided to the store or business.

The committee should arrange to have all materials at the site several days before the first workday. A day or two before the workday, the committee will meet at the site and check the materials against the master list to be sure all needed materials are accounted for. If any items are missing they can be located or purchased prior to the workday to avoid confusion and delay when volunteers are ready to begin construction.

After materials have been checked against the master list, they need to be separated into separate areas according to the original lists made for each playground area or piece of equipment. The separated materials are labeled so that they will be ready for each group of volunteers when they arrive on workday.

Preparing the Site

The final responsibility of the materials and site committee is to prepare the site for construction. This must be completed prior to the first scheduled workday so that it will be ready for construction.

If a playground already exists at the site there may be equipment to be moved or removed. This is the first step in preparing to reconstruct the playground. If paving or asphalt is to be removed, it will also need to be done prior to preparing the site for construction.

A site which is being developed for the first time may need to be cleared of brush and other growth around existing trees. Any needed clearing is accomplished before further site preparation is begun.

In some instances changes are desired in the configuration of the site. Hills may be needed or low areas built up for improved drainage. Any grading work which is needed to effect these changes should also be completed as a preliminary stage in construction.

Some playground developers have the resources to install a sprinkling system to water grassy areas on the site. If such a system is to be installed, it is placed after grading is completed and prior to construction.

Just before the workday, there may be concrete work which will be done in preparation for installation of climbing structures, tire climbers, swings, or other components which will be strengthened by setting them into concrete. This preliminary construction work should also be done if possible prior to construction If concrete work is initiated on the workday, volunteers will be delayed until it has set and may lose valuable time from building. In some cases such as a tire climber attached to a climbing structure, concrete work to attach the climber at ground level cannot be established until the climbing structure has been completed. This type of concrete work cannot be initiated until the structure is attached and measured for proper location of concrete footings.

The Workday Committee

The workday committee works very closely with the planning committee and materials and site committee. Although the major responsibilities occur at the time of playground construction, its work begins when workdays are scheduled and volunteers are recruited to help with building.

Setting Workdays and Project Timeline

After the planning committee has completed the playground design and has obtained approval from the groups involved, the workday committee can begin long range planning for workdays. In cooperation with the materials and site committee, scheduling is determined for preliminary site work, construction workdays and follow-up activities. Depending on the size of the playground and the scope of what is to be accomplished, the two committees will determine how many days will be needed for site clearing and preparation and how many days will be needed for actual

construction. With these decisions made, the workday committee can then consult the calendar to establish a timeline for initiating and completing stages of project construction. Alternate days are included to allow for uncooperative weather which may affect site preparation days and workdays. Figure 1 describes how project and committee timelines are established.

Determining Workday Responsibilities

After studying the completed playground design, the workday committee determines how to organize groups of volunteers for various components which are to be constructed. Each part of the playground is considered for amount of work which will be required and how many workers should be assigned to the group. For example, a small playground may have a group designated for the climbing structure with subgroups assigned to construct separate parts of the structure. Another group will be in charge of the vehicle path, a third committee will prepare a vehicle for dramatic play, and a fourth group will work on loose parts. On a large playground several committees will work on exercise or physical play area and single committees will be assigned to the loose parts zone and the creative arts zone. The workday committee will assess the needs of playground components and assign leadership and volunteer workers in proportion to the amount of work which each committee will accomplish on the work day.

A general evaluation of workday activities and assignments of workers to committees is followed by development of a list of tasks or combination of tasks which the committee will be completing on the workday. Members of the workday committee will meet with the leader of each

workday committee to work on a task analysis and sequence of activities. The chairman for the committee which will construct the climbing structure will determine the steps the committee will follow to build the structure. The slide, climbing ramp, fireman's pole and platform all are part of the climbing structure. The committee will be subdivided to construct the separate components followed by attaching the separate pieces to the platform. A step by step task analysis might proceed as follows:

Platform

(1) Measure and saw lumber

(2) Determine placement of platform supports

(3) Attach platform deck framework

(4) Attach base framework supports

(5) Attach deck platform

(6) Attach slide, ramp, and fireman's pole

(7) Attach protective rail on deck

Each separate component will also have a similar step-by-step procedure established. The leader of the committee will analyze each construction so that each worker will understand what to do and how it fits into the efforts of the other members of the group.

At the beginning of workday the committee leader will meet with members of the group to review the tasks to be done and explain construction details when necessary. As the groups begin to work, the committee leaders will be working within the group, but also remain available to answer questions or resolve unexpected problems as they arise.

Workdays Supervision

The workday committee will want to appoint one person who will be the workday coordinator. This person will be in charge of the workday and will function as a central person who will be available to the entire group at all times during the day. The leader will answer questions, send for tools or materials, or make phone calls if the need arises. The coordinator should understand all phases of construction so that questions about construction can be answered or alternative strategies suggested if necessary. The leader circulates among working groups to offer encouragement and anticipate and prevent possible difficulties.

The leader will also assist as coordinator of sequence of construction between groups. If multiple groups are engaged in cooperative building, the leader is available to help facilitate group interaction. If the project is large, the workday committee may want to have two persons in leadership roles in case one leader is unable to attend at the last minute. Because the workday committee is involved in contacts by telephone, it may also be helpful if there are two people available to answer telephone calls as the workday approaches.

The workday leader will need to have another person whose sole responsibility on workday will be to run last minute errands. The "gofer" will also be familiar with the design and materials so that last minute errands can be run during the day to acquire needed nuts and bolts or additional lumber or paint. In spite of excellent planning, there are always things that are discovered to be needed after work begins. The gofer makes the trips to get missing parts so that the workday leader will not have to leave the site.

Preparation for Workday

There are additional responsibilities the workday committee will address as the date for workday approaches. These responsibilities include acquiring tools, recruiting workers and making arrangements for refreshments.

If workday is to proceed smoothly, the workers must have plenty of tools to carry out the tasks. When conducting the task analysis for each section of the playground a member of the committee will note what kinds of tools will be needed. A call will be sent out prior to workday and records made of tools which may be borrowed. It is important to have enough tools for all groups. If an inadequate number of tools is available, workers may lose time waiting for someone else to finish with a needed drill or saw.

Another vital function for the workday committee is to make sure that there will be enough workers coming to be able to accomplish goals for the workday. Committee members may wish to call those who have volunteered early to confirm that they will be able to work that day. If it is determined that additional people are needed, the committee will want to contact additional prospects prior to workday.

Last but not least, someone on the workday committee will be responsible for meals and refreshments. Sometimes all the workers bring food from home and there is a mutual sharing at lunchtime. Each worker or family brings an ice chest for refreshments during the day. On other occasions a workday committee prepares food for all the workers and provides ice tea, cold drinks and snacks throughout the work day in addition to a noon meal. Whatever arrangements are made, the committee will want

to make sure that there will be plenty of food, water and drinks for hungry and thirsty workers.

The planning committee may need to call additional general meetings prior to the first workday to coordinate committee work and be sure that everything is ready for construction. A timeline can be established early in the planning process to help each committee understand how their responsibilities fit into the overall project (See Figure 1). Just prior to the workday a final coordinating meeting should be held to make a final review of preparations.

When all planning has been completed, the most exciting part of the project begins. Now you are ready to build your playground. The satisfying part of the project will be when you see children enjoying what you and many others have created. That's what building a creative playground is all about!

NOTE: Appendix A of the original document is copyrighted and therefore, not available. It has not been included in the pagination.

Figure 1
Sample Playground Project
Timeline

Project	September				October			November				December				January				February				March				April				May			
		1st Plan. Meet.										2nd Plan. Meet.													First Workday* 3rd Planning Meeting									
																									x									
Planning Committee		Beg. Playground Design	Visit Playground		Site Study Completed		Design Plan Completed			Model Completed		Combined Committee Meet. for Proj. Coord.			Combined Committee Meetings to Plan Workdays																				
-------		-	-	x	-	x	-	x	-	-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-
Site and Materials Committee		Beg. Search for Mats.				Beg. Record of Mat. Sources					Complete Init. Mat. Info.			Cont. Coll. Mat. Info.											Arr. for Mat. Del.				Site Prep.			Site Prep. Org. Mat.			
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Workday Committee		Beg. Search for Vols.				Beg. Compiling list of vols.								Complete Proj. Timln.			Begin Proj. Timeline								Beg. Work-days Arr.				Complete Workday Arr.			Complete Vol. List			
xxxxxxxx		x	x	x	x	x	x	x	x	x	x	X	X	X	X	x	x	x	x	X	x	x	x		x									